

Abstract

A three-dimensional (3-D) machine-vision involving a method and apparatus for performing segmentation of 3-D objects. Multiple stereo-related sets (left/right, top/left, top/right) of two-dimensional video pixel data are separately processed into sets of edges. Each stereo-related set is then pair-wise processed to convert pairs of sets of edge data into 3-D point data. Multiple sets of pair-wise 3-D data are then merged and used for obtaining 3-D features which are then clustered into discrete 3-D objects that can lie on any arbitrary plane.